

AMENDMENTS TO THE CLAIMS

1. (Original) Noncorrosive auxiliaries for soldering aluminium and/or for upgrading aluminium alloys based on alkali metal fluoroaluminates, characterized by a content of coprecipitated metallates.
2. (Original) Noncorrosive auxiliaries according to Claim 1, characterized by a content of added metallates.
3. (Currently amended) Noncorrosive auxiliaries according to ~~Claims 1 and 2~~ claim 1, ~~characterized in that wherein the metallates are compounds of the elements of main groups 2 to 5 of the periodic table of elements PTE, in particular compounds of strontium, indium, tin, antimony and/or bismuth, are present as metallates.~~
4. (Currently amended) Noncorrosive auxiliaries according to ~~Claims 1 and 2~~ claim 1, ~~characterized in that wherein the metallates are compounds of the transition elements having atomic numbers of from 21 to 30, from 39 to 47 and/or from 57 to 79 of the periodic table of elements, in particular of zirconium, niobium, cerium, lanthanum and/or yttrium, are present as metallates.~~
5. (Original) Process for preparing noncorrosive auxiliaries for soldering aluminium and for upgrading aluminium alloys based on alkali metal fluoroaluminates, characterized in that metal compounds from the group of compounds of the elements of main groups 2 to 5 of the periodic table of elements PTE and/or compounds of the transition elements having atomic numbers of from 21 to 30, from 39 to 47 and/or from 57 to 79 of the periodic table of elements are brought into contact with at least one of the reactants hydrated alumina, hydrogen fluoride and/or an alkali metal compound.
6. (Currently amended) Process for preparing auxiliaries according to Claim 5, characterized in that the metal compounds are used in the form of their salts, ~~preferably~~ their halides, nitrates, carbonates, sulphates, borates, phosphates, or hexafluorosilicates, or their oxides, either as individual compounds, mixtures or in the form of metal complexes.

7. (Currently amended) Process for preparing auxiliaries according to ~~Claims 5 and 6~~ claim 5, characterized in that strontium, indium, tin, antimony and/or bismuth compounds in the form of their halides, nitrates, carbonates and/or oxides are used.
8. (Currently amended) Process for preparing auxiliaries according to ~~Claims 5 and 6~~ claim 5, characterized in that zirconium, niobium, cerium, lanthanum and/or yttrium compounds in the form of their halides, nitrates, carbonates and/or oxides are used.
9. (Original) Process for preparing auxiliaries according to Claim 5, characterized in that lithium, sodium, potassium, rubidium and/or caesium compounds or mixtures thereof are used as alkali metal compounds.
10. (Original) Process for preparing auxiliaries according to Claim 9, wherein said alkali metal compound is characterized in that an alkali metal hydroxide, in particular potassium hydroxide, is used as alkali metal compound.
11. (Original) Process for preparing auxiliaries according to Claim 5, characterized in that the metal compounds are used in amounts of up to 30% by weight, ~~preferably from 0.01 to 20% by weight~~, based on alkali metal fluoroaluminate.
12. (Currently amended) Process for preparing auxiliaries according to ~~any of Claims 5 to 11~~ claim 5, characterized in that the metal compound is introduced into the reaction mixture of hydrated alumina and hydrogen fluoride.
13. (Currently amended) Process for preparing auxiliaries according to ~~any of Claims 5 to 11~~ claim 5, characterized in that the metal compound is introduced into the reaction mixture of hydrated alumina, hydrogen fluoride and alkali metal hydroxide.
14. (Currently amended) Process for preparing auxiliaries according to ~~any of Claims 5 to 11~~ claim 5, characterized in that the metal compound is firstly reacted with the hydrogen fluoride, after which hydrated alumina and alkali metal hydroxide are added.

15. (Original) Process for preparing auxiliaries according to Claim 5, characterized in that mechanical mixing of the metal compounds with alkali metal fluoroaluminate is carried out.

16-19 cancelled

20. (New) Noncorrosive auxiliaries according to claim 1, wherein the metallates are strontium, indium, tin, antimony, bismuth, zirconium, niobium, cerium, lanthanum and/or yttrium.

21. (New) Process for preparing auxiliaries according to Claim 9, wherein said alkali metal compound is potassium hydroxide and the metal compound is used in amount from 0.01 to 20% by weight based on alkali metal fluoroaluminate.

22. (New) A flux for soldering components composed of aluminium and/or aluminium alloys which comprises the auxiliary as claimed in claim 1.

23. (New) The flux as claimed in claim 22, wherein the auxiliary is applied as aqueous or organic suspension, as surface coating composition, as paste or as dry substance.

24. (New) An additive for upgrading alloys which comprises the auxiliary as claimed in claim 1 being used as a dry substance.

25. (New) The flux as claimed in claim 22, wherein the flux is used for functionalizing the surfaces of the components to be soldered together.